

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

What is claimed is:

1. **(Previously Presented)** A method for manufacturing optical fiber with enhanced photosensitivity comprising the steps of:
 - forming a molten layer of glass;
 - drawing a fiber from said molten layer of glass at a temperature of between about 1975°C and 1995°C; and
 - writing a grating on said optical fiber by exposing said fiber to ultraviolet radiation.
2. **(Canceled)**
3. **(Currently Amended)** The method for manufacturing optical fiber with enhanced photosensitivity according to claim 1, wherein said drawing step further comprises drawing said fiber at a tension between 100 gm and 250 gm.
4. **(Currently Amended)** The method for manufacturing optical fiber with enhanced photosensitivity according to claim 1, wherein said molten layer is manufactured in accordance with a chemical vapor deposition process.
5. **(Original)** The method for manufacturing optical fiber with enhanced photosensitivity according to claim 4, wherein said forming step comprises forming glass layers corresponding to a core and a cladding.
6. **(Currently Amended)** The method for manufacturing optical fiber with enhanced photosensitivity according to claim 1, wherein said molten layer is manufactured in accordance with a modified chemical vapor deposition process.

7. **(Currently Amended)** The method for manufacturing optical fiber with enhanced photosensitivity according to claim 1 2, further comprising the step of doping said optical fiber along a core portion.

8. **(Original)** The method for manufacturing optical fiber with enhanced photosensitivity according to claim 7, wherein said doping step comprises doping the core portion with germanium.

9. **(Original)** The method of manufacturing optical fibers with enhanced photosensitivity according to claim 7, wherein said doping step comprises doping the core portion with boron.

10. **(Original)** The method for manufacturing optical fiber with enhanced photosensitivity according to claim 3, wherein said draw tension remains constant throughout said drawing step.

11. **(Currently Amended)** The method for manufacturing optical fiber with enhanced photosensitivity according to claim 1 2, wherein said drawing step comprises drawing said optical fiber at a temperature between about 1980°C and 1990°C.

12. **(Canceled)**

13. **(Previously Presented)** The method for manufacturing optical fiber with enhanced photosensitivity according to claim 1, wherein said ultra violet radiation is between about 193 and 248 nm in wavelength inclusive.

14. **(Currently Amended)** An improved method for manufacturing optical fiber with enhanced photosensitivity wherein said fiber is drawn from a molten layer of glass at a temperature and a predetermined tension of ~~less than 100 gm~~, wherein the improvement comprises the steps of:

lowering said temperature that said fiber is driven to between about 1980°C and 1990°C while ~~increasing said preselected~~ the draw tension is ~~to~~ between 100 gm and 250 gm, and writing a grating on said optical fiber by exposing said fiber to ultraviolet radiation.

15. **(Canceled)**

16. **(Previously Presented)** The improved method for manufacturing optical fiber with enhanced photosensitivity according to claim 14, wherein said temperature is lowered to between about 1975°C and 1995°C in said temperature lowering step.

17. **(Canceled)**

18. **(Original)** The improved method for manufacturing optical fiber with enhanced photosensitivity according to claim 14, wherein said molten layer of glass is manufactured in accordance with a modified chemical vapor deposition process.

19. **(Previously Presented)** A method for manufacturing optical fiber with enhanced photosensitivity comprising the steps of:

drawing said fiber from a molten layer of glass at a temperature of about 1985°C and a tension of about 200 gm; and

writing a grating on said optical fiber by exposing said fiber to ultraviolet radiation.

20. **(Original)** The method of manufacturing optical fiber with enhanced photosensitivity according to claim 19, wherein said molten layer is manufactured in accordance with a chemical vapor deposition process.

21. **(Original)** The method for manufacturing optical fiber with enhanced photosensitivity according to claim 19, wherein said molten layer is manufactured in accordance with a modified chemical vapor deposition process.
22. **(Original)** The method for manufacturing optical fiber with enhanced photosensitivity according to claim 19, further comprising the step of doping said optical fiber along a core portion.
23. **(Original)** The method for manufacturing optical fiber with enhanced photosensitivity according to claim 22, wherein said step of doping comprises doping said core portions with germanium.
24. **(Original)** The method of manufacturing optical fiber with enhanced photosensitivity according to claim 22, wherein said doping step comprises doping step comprises doping the core portion with boron.
25. **(Canceled)**
26. **(Previously Presented)** The method for manufacturing optical fiber with enhanced photosensitivity according to claim 19, wherein said ultraviolet radiation is between about 193 and 248 nm in wavelength inclusive.
27. **(Previously Presented)** A method for manufacturing optical fiber with enhanced photosensitivity comprising the steps of:
drawing said fiber from a molten layer of glass at a temperature of between about 1900°C and 1995°C ; and
writing a grating on said fiber by exposing said fiber to ultraviolet radiation.
28. **(Previously Presented)**) A method for manufacturing optical fiber with enhanced photosensitivity comprising the steps of:

drawing said fiber from a molten layer of glass at a temperature of between about 1900°C and 1995°C ; and
doping said optical fiber along a core portion.

29. **(Previously Presented)** A method for manufacturing optical fiber with enhanced photosensitivity comprising the steps of:
- forming a layer of molten glass;
 - drawing a fiber from said molten layer of glass at a temperature of under 2025°C and tension of between 100 gm and 250 gm, and
 - writing a grating on said optical fiber by exposing said fiber to ultraviolet radiation.
30. **(Previously Presented)** A method for manufacturing optical fiber with enhanced photosensitivity comprising the steps of:
- forming a layer of molten glass;
 - drawing a fiber from said molten layer of glass at a temperature of under 2025°C and at a tension of between 100 gm and 250 gm, and
 - doping said optical fiber along a core portion.

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Amendment to the Drawings:

The attached drawing sheet includes changes to Figure 2. This sheet replaces original sheet including Figure 2. Figure 2 has been amended to include the labels A-H, as requested by the Examiner.

Attachment: Replacement Sheet
Annotated Sheet Showing Changes